

Application No.: 10/624012

Case No.: 58785US002

REMARKS

Claims 1-49 remain pending in the application. The specification has been amended on page 9 to overcome the objection noted by the Examiner, and on page 3 to correct a typographical error. In addition, claims 8, 47 and 48 have been amended to overcome the informalities in antecedent basis.

In the first Office Action, claims 20-26, 36-46 and 49 were allowed, and claims 3-5, 8-10, 15, 19, 31, 35, 47 and 48 were indicated to contain allowable subject matter. Applicant extends its appreciation for the recognition of such patentable subject matter. Reconsideration of the patentability of all of the claims is courteously requested.

In U.S. Patent No. 6,350,071 to Conwell et al., a printer 10 includes a UV lamp 5 that is shown in more detail in Fig. 4. In column 4, lines 11-13, it is indicated that a radiation sensor 18 may be utilized to feed back to the UV lamp the characteristics of the emitted radiation.

However, there is no teaching in this reference that the radiation sensor 18 is used to vary the amount of radiation as set out, for example, in applicant's claim 1. In column 3, lines 4-5 of the '071 patent, it is indicated that photosensor controls "may be utilized to maintain lamp intensity". In other words, the photosensor controls are provided to help ensure that the emitted radiation is maintained at the same intensity over a period of time. For example, if the emitted radiation tends to decrease as the lamp ages, this patent appears to suggest that the power directed to the lamp can be increased in order to maintain the intensity at the same level.

By contrast, applicant's claim 1 recites that a controller varies the amount of radiation delivered by the source of radiation in accordance with the signal received from the sensor. In this manner, for example, the intensity of radiation can be increased in instances where an image with better mar and solvent resistance is desired.

In the text of the '071 patent bridging column 2, line 67 to column 3, line 4, the patentee indicates that selectable light filters and/or lamps may be utilized to vary the wavelength and light energy for different photoinitiator chemistry of the inks. It is also indicated that pulse xenon flash lamps may optimize different wavelengths to match the ink with shifting current densities. However, there is no indication that the filters or lamps are varied automatically, or are connected to a controller for varied operational conditions in use. Furthermore, there is no

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indication in this patent that the characteristics of the emitted radiation as sensed by the sensor 18 are used by a controller or otherwise used to vary the filters or lamps.

Moreover, the '071 patent does not teach the concept of a controller that has a input for receiving at least one characteristic of an ink, substrate or printing productivity parameter. There is only an indication, as discussed above, that the sensor 18 is utilized to maintain lamp intensity. Consequently, nothing in the '071 patent teaches or otherwise suggests the concept of a controller that varies the amount of radiation, or a controller that varies the amount of radiation in accordance with at least one characteristic of the ink, substrate or printing productivity parameters.

The discussion as set out above with respect to claim 1 also applies to claims 2-19. With respect to claims 27-35, it is submitted that the '071 patent does not teach the act of "varying the amount of radiation directed toward the ink in accordance with the amount of radiation detected by the sensor" for the reasons set out above.

It is also submitted that the claims are not obvious in view of 35 U.S.C. 103(a). As noted above, the '071 patent does not teach or otherwise suggest a printer or a method of printing wherein the amount of radiation is varied in accordance with a sensed amount of radiation. The patent to Lund, U.S. No. 6,154,227 also does not disclose this subject matter.

The Japanese publication to Tanagawi, JP 2020015a is not directed to a printer or a method of printing. The patent to Richmond, U.S. No. 4,033,263 describes a screen printing system, but not an inkjet printing system. Moreover, this reference does not teach the concept of varying radiation intensity using a characteristic of the ink in combination with a sensor signal.

In view of the foregoing, it is sincerely believed that this application is in full condition for allowance, and such action is courteously solicited. However, if any questions remain, the Examiner is invited to contact the undersigned by telephone at the number set out below.

Respectfully submitted,

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Date

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833

By: James D. Christoff
James D. Christoff, Reg. No.: 31,492
Telephone No.: (651) 733-1512